

24
16. (Amended) A device according to Claim [10] ²¹ ~~31~~ further including a device for mixing connected in series to the column as to produce a homogenous mixture of the said sample with the [buffer of the column] column-buffer.

D2
E
comprising:
1
29. (Amended) A device for measuring the activity of an enzyme[s] in liquids in a vessel, said device having] ~~comprising~~ a column, said column having a chromatographic carrier having a substance capable of binding an enzyme inhibitor corresponding to [at least one] said enzyme in a sample, a valve/pump assembly between said column and said vessel for filling said vessel with a substrate and [a] the sample, said sample and said substrate reacting to form a cleavage product, a detector for measuring the increase of the concentration per unit of time of said cleavage product, and a means for enabling the passage of said sample through said column or outside said column into said vessel [as desired].

34
E
comprising:
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30. (Amended) A device for measuring the activity of an enzyme[s] in liquid ~~in~~ a vessel, [said device having] ~~comprising~~ a column for treating a sample, said column carrying a chromatographic carrier treated with a substance capable of binding an enzyme inhibitor corresponding to [at least one] said enzyme in [a] the sample, said column being connected for discharge into [a] the vessel, a substrate source being connected for discharge into said vessel and reaction with said sample thereby releasing a cleavage product, a detector for measuring the increase of the concentration per unit of time in the treated vessel of said cleavage product[, and

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further including a means for measuring the [degree of dilution] activity of said enzyme of the discharged sample].

E 21
31. (Amended) A device for measuring the activity of an enzyme[s] in liquid ~~in~~ comprising:
a vessel, [said device having] ~~comprising~~ a column for treating a sample, said column being exchangeable and filled with a chromatographic carrier treated with a substance [having] capable of binding an enzyme inhibitor which corresponds to [at least one] said enzyme in the sample, a valve/pump assembly having a supply tube connected in series to a sample reservoir so as to fill [a] the vessel with a buffer and the treated sample, a substrate source connected to said vessel for discharge of a substrate into said vessel for reaction with said treated sample, thereby releasing a cleavage product, and a detector for measuring the increase of the concentration per unit of time of [at least one] said cleavage product, further including a control device connected [in series] to the column for monitoring the purity of ^a~~the~~ buffer discharging the sample from the column.

E 24
35. (Amended) A device according to claim 29¹ [further including] capable of functioning with a column buffer discharged from the column and including a control device for checking the purity of the column buffer [discharged from the column], said control device working photometrically.

⁵
~~36~~. (Amended) A device according to claim ¹~~29~~ [further including] capable of functioning with a column buffer discharged from the column and including an arrangement connected in series to the column for measuring the degree of dilution of the discharged sample caused by the column buffer, said arrangement capable of also measuring the volume of liquids.

D5
⁶
~~37~~. (Amended) A device according to [one of the] claim ¹~~29~~ [further including a] capable of functioning with a measuring buffer and a column-buffer, wherein the valve/pump [arrangement] assembly admixes [a] the measuring buffer to the said sample[, and if need be, and optionally to] the column buffer and to the substrate in the [test tue] vessel so as to produce definite experimental conditions.

⁸
~~38~~. (Amended) A device according to claim ¹~~29~~ further including a means to thermostat the [test tube] vessel.

D6
⁹
~~40~~. (Amended) A device according to claim ¹~~29~~ further including at least one valve associated with the column to pass a buffer as a wash liquid at least through the column and the valve/pump [arrangement] assembly.

¹⁰
~~41~~. (Amended) A device according to claim ¹~~29~~ wherein further including a computer [to run and control] capable of running and controlling [and if need be,] the mixing

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D6 and charging of the vessel and the detection and evaluation of the concentration increase per unit of time of [at least one of the] said cleavage product[s] of the substrate.

¹⁴
~~44.~~ (Amended) A device according to claim ¹¹~~30~~ further including a column buffer and a control device for checking the purity of [the] a column buffer discharged from the column, said control device working photometrically.

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D7 ¹⁵
~~45.~~ (Amended) A device according to claim ¹¹~~30~~ further including ~~an arrangement connected [in series] to the column for measuring the [degree of dilution] concentration of the discharged sample into said vessel [caused by the column buffer]~~, said arrangement capable of also measuring the volume of liquids.

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¹⁶
~~46.~~ (Amended) A device according to claim ¹¹~~30~~ [further including] capable of functioning with a buffer, wherein the valve/pump [arrangement] assembly admixes a measuring buffer to the said sample[, and if need be, to] ^{and optionally a} ~~the~~ column buffer [and to the substrate] in the [test tue] vessel so as to produce definite experimental conditions.

D8 ¹⁸
~~48.~~ (Amended) A device according to claim ¹¹~~30~~ further including a means to thermostat the [test tube] vessel.

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¹⁹
~~49~~. (Amended) A device according to claim ~~30~~¹¹ further including at least one valve [connected] associated with to said column to pass a buffer as a wash liquid at least through the column and the valve/pump [arrangement] assembly.

D8 ²⁰
~~50~~. (Amended) A device according to claim ~~30~~¹¹ further including a computer to run and control [and if need be,] the mixing and charging of the vessel and the detection and evaluation of the concentration increase per unit of time of at least one of the cleavage products of the substrate.

²⁷
~~53~~. (Amended) A device according to claim ~~31~~²¹ [further including a control device for checking the purity of the column buffer discharged from the column,] wherein said control device work[ing]s photometrically.

D9 ²⁸
~~54~~. (Amended) A device according to claim ~~31~~²¹ [further including] capable of functioning with a column buffer and an arrangement connected in series to the column for measuring the degree of dilution of the discharged sample caused by the column buffer, said arrangement capable of also measuring the volume of liquids.

²⁹
~~55~~. (Amended) A device according to [one of the] claim ~~31~~²¹ wherein the valve/pump [arrangement] assembly admixes a measuring buffer to the said sample[, and if need

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E *D9* *and optionally column*

be, to] the [column] buffer [and to the substrate] in the [test tube] vessel so as to produce definite experimental conditions.

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~~57.~~

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(Amended) A device according to claim ~~31~~ further including a means to thermostat the [test tube] vessel.

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~~58.~~

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D10 (Amended) A device according to claim ~~31~~ further including [at least one] a valve connected to said column to pass a buffer as a wash liquid at least through the column and the valve/pump [arrangement] assembly.

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~~59.~~

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(Amended) A device according to claim ~~31~~ further including a computer to run and control [and if need be,] the mixing and charging of the vessel and the detection and evaluation of the concentration increase per unit of time of at least one of the cleavage products of the substrate.

REMARKS

In the above identified Office Action the Examiner has objected to claims 13 and 16 because of erroneous dependencies. Applicant has corrected these matters, and as such, claims 13 and 16 are considered to depend from the correct claim 31.

The Examiner has indicated that Claims 12, 15, 29-31 and 33-59 would be allowable if amended to overcome the rejections under §112. This applicant has done.